

THE MÆDIAL SECRET AT THE INSTITUTE.—I was one of the disappointed auditory, who attended at the Institute of Architects on Monday to hear Dr. Henzelmann "explain a series of drawings illustrative of his alleged discovery of the principles of mediæval architecture." What this announcement means I will not decide, but it is strange such an unanimity of opinion as to its meaning should have prevailed, and that nobody knew, until informed by the chairman, that the meeting had been convened merely to hear some introductory remarks which threw no light whatever on the subjects to be investigated. Whether designed or not, to me this proceeding looks very like a ruse, for I am sure but few gentlemen would have attended unless, as Mr. l'Anson said, they had expected the whole mystery would have been unfolded. What does the Doctor want? Does he intend to recreate the architecture of the Middle Ages, or does he intend publishing a work on his discovery, and would to get it endorsed by the Institute. It is very necessary something more definite should be known, for if the latter is his sole object, the time of the Institute was expended in vain.—PALLADIO.

ECCLESIOLOGICAL SOCIETY.—At a committee meeting held on November 23rd, Mr. Hope in the chair, a letter and books were received from the Danish Church History Society. A conditional grant of 5*l.* was made to the restoration of Dorchester church. A vote of thanks was received from the council of the School of Art and Museum, for the casts, &c. presented by this society; and it was agreed to deposit at the museum the books and plates of the society, on condition that members of the Ecclesiological Society might have free access to them, and that members of the committee might have the right of removing them for use. An offer of rooms at a building about to be engaged by the committee of the Architectural Exhibition was considered. It was resolved that the next part of the *Instrumenta Ecclesiastica* should contain school fittings. Sir Charles Anderson exhibited some sketches, architectural and others, made by himself on a recent tour in Norway.

THE RUINS AT TINIAN, IN THE PACIFIC.—We observe in the *New York Literary World*, with reference to the subject of our recent paragraph on these ruins, that they cannot be said to have been newly discovered, inasmuch as they were described by Anson, M. I. Arago, and probably others. All, however, unite in ascribing to them an extreme antiquity. It is said, that throughout the whole island (now almost deserted) a great number of these singular ruins were found. Anson describes them as composed of "sand and stone cemented together and plastered over;" and Arago says, many of the pilasters are surmounted by hemispheres of stucco.

GAS AND WATER.—From communications by Mr. Charles Carus Wilson, in the *Jersey Sun* newspaper, it appears that a scheme for the proper supply of gas to St. Helier's, St. Aubin's, and ultimately the whole island, is now on foot, the inhabitants having long been dissatisfied with both the price and the quality of the gas for some years supplied to them—at least to the shopkeepers, for no endeavour appears to have been made as yet to extend the use of gas into private dwellings, the principal field of profit, one would think, in such a place as Jersey; and even the shops have been very sparingly supplied, the price being one great obstacle to the extension and the manufacturer's profit in both cases.—Mr. George R. Booth, of Wandsworth, has patented some improvements in the production of gas, which consist in manufacturing it from seeds, leaves, and stems of plants, &c. instead of the oils, gums, or resins obtained therefrom in such process. The form of apparatus or retort employed, it is said, may be very much varied: the patentee prefers, however, to project the oily seeds on to a highly-heated surface, as being in practice an effectual mode of working, and enabling the gas to be made in small quantities, as required for use. A portion of oil, it is added, will be found to be

condensed in the pipes leading from the retort, which may be economically employed in the generation of gas.—Mr. John Swarbrick, of Blackburn, has patented a method of manufacturing clay retorts, for gas and other purposes, dry enough to be at once removed to the oven, and, when baked, free from cracks or fissures.—Notice has been given that application is to be made to Parliament for leave to bring in a Bill to incorporate a company for the purpose of supplying with water the town and parish of Great Yarmouth, and also the parishes of Ormesby, Little Yarmouth, &c.

ATHENS.—A storm on the 26th of October threw down one of the columns of the temple of Jupiter Olympius. A letter says: "No one can have any idea of the majestic proportions of this fallen column, though accustomed (as you are) to see it standing. This is the observation of all who flock to look at it, for all Athens has assembled to-day to view this exhibition of Almighty power. The effect is truly sublime. The column was thrown down by the pressure of the wind causing the base to leeward to sink into soft ground. Thus it toppled over, and lies like a pile of bricks or cards, one layer behind the other, exactly in a line due north and south: the capital, split exactly in two pieces, horizontally, lies upon its upper side, the tambours on their respective sides detached from each other, and separated at almost equal distances of about three or four inches. There are seventeen pieces, including the capital, but exclusive of the base, which is not uprooted, but inclined at an angle of seventy degrees, from which the remaining part of the column slipped and toppled off. Two of the columns of the Erechtheum on the west side have also fallen, and are broken in pieces."

APPOLD'S CENTRIFUGAL PUMP: ALLEGED INFRINGEMENT OF PATENT.—In the Court of Exchequer, an action was last week brought by Mr. Charles Ttley, of Bradford, against Messrs. Easton and Amos, of Southwark, engineers, for the infringement of a patent obtained in February, 1846. A similar machine was placed in the Great Exhibition of 1851 by Mr. Appold, for whom the defendants manufactured it, and for which a gold medal was awarded to Mr. Appold. The plaintiff had allowed this invention, for which he held a patent, to lie dormant until that period, when he claimed Mr. Appold's machine as his discovery, and brought the present action to establish his alleged right. The plaintiff's machine had, on one occasion, emptied 3,000 gallons of water per minute out of a coffer-dam, and had been otherwise tested. For the defence it was endeavoured to prove that the principle of the alleged invention was substantially the same as that specified in the patent of a Mr. Hale, obtained in 1832. The Chief Baron left it to the jury to say whether the principle of the plaintiff's patent was the same as that of Hale's; or, in other words, was Mr. Appold working on Hale's discovery, or upon a different invention, subsequent in point of date, of which the plaintiff claimed to be the author? The jury found a verdict for the defendants.

ALLEGED REMARKABLE DISCOVERY IN EGYPT.—At the New York Historical Society, on 2nd ult. according to an American paper, Dr. Abbott, who had been twenty years in Egypt, exhibited a gold ring, weighing about three sovereigns, found in a tomb on the south side of the great pyramid of Loupou (the Cheops of Herodotus, and the second Pharaoh of the fourth dynasty), and having the inscription "Loupou," in its inner side, within an oval (the hieroglyphic mark of sovereignty). Its age, adds the writer, is upwards of three thousand years before Christ, and the beauty of the engraving of the hieroglyphic could only be seen by means of a microscope, and could not now be surpassed.

MECHANICS' INSTITUTE:—EARL OF ZETLAND.—On Saturday, the Earl of Zetland invited the inhabitants of the village of Marske, near Newcastle-upon-Tyne, and the ironstone miners of the neighbourhood, to meet him at the National School in the evening, to propose to them the establishing of a Mechanics' Institute.

NAILWORKS AT GATESHEAD.—Within the last year nine nail-cutting machines have been set to work at a new establishment, called "The North of England Nailworks," at Gateshead, by Mr. Thomas Andrews, the proprietor. Four more of these machines are now in course of erection; and the *Newcastle Journal* gives an account of the whole establishment, from which the following particulars are gathered:—The iron used is in sheets 9 feet long and 24 to 30 in. broad. The first process is to cut these sheets crossways into slips, the width of such slips being regulated by the length which it is intended to make the nails to be cut from them. It is no longer beating and hammering, but cutting, without the iron being heated at all; and this is done at one of the largest and most powerful machines, by a man inserting the end of the sheet below a blade or cutter, which, descending, cuts the slip away; and, as the cutter rises, the end of the sheet is reinserted and cut until the whole is done. The slips are then cut into nails by machines the same in principle, but with modifications adapting them to nail cutting. Thus, one end of the slip of metal is fastened in a pair of pliers, having a round wooden handle, which handle is made to rest loosely in the groove of an upright in front of the machine, and is placed at a slight angle to the other end, which is then held forward; and, as one nail is cut off by the rapidly-descending cutter, the person in charge reverses the sides of the slip for the other. The tapering of the nail towards the point is effected by the iron being held towards the cutter at the required angle, and the slip of iron placed under the cutter is reversed, in order that the part of it whence the slender part of the nail was cut away may form the thick part of the next. Quick as thought the cutter descends, cutting off a nail at each stroke, the iron being prevented from going too far under the cutter by a regulating gauge behind; and the nails, as they drop one after the other below the cutter, are caught by a forward movement of what may be called a vice, and, while each is momentarily held fast, a lateral movement drives forward a die, by which is impressed the form of the head, and then the nail is released to make way for another, which is being cut while the one that preceded it was being headed. The process goes on at the rate, for each machine, of 15,000 an hour for tacks, and 6,000 an hour for the larger nails, with only a boy to feed each machine, and one or two men in charge as overseers. One shoe-bill machine will cut twelve nails at one stroke; and as 200 strokes may be made in one minute, about 150,000 nails may be cut in an hour at one machine. Nails are here also made by the original process; and nothing, perhaps, is more striking than the contrast of speed between the different processes of making nails by hand-labour and by machinery, going on in the same manufactory.

THE IRON TRADE.—The artificial excitement in this trade, which, according to the Birmingham, Wolverhampton, and other papers, not only continues but increases, is now further complicated by the deluging of coal-mines, added to the previous rise of colliers' wages, and their comparative idleness in consequence. The minimum price of bar-iron is now declared to be 10*l.* a ton (previously to 8th September, 5*l.* 7*s.* 6*d.* was the selling price), and pig-iron is rising from 3*l.* 15*s.* and 4*l.* a ton. The colliers are giving notices of a demand for a farther rise in wages. The supply by these checks is at least likely to be kept down, as the price rises, till the grand crash comes. The increase of demand, however, has already led to the formation of many new works, which of course will tend to increase the supply demanded by the speculators and the legitimate trade. As for exports,—from the precipitate and blindfold rise in prices, it appears as if it were intended to cut that branch of the trade at once and altogether.

BATHS AND WASHHOUSES FOR SHREWSBURY.—At a public meeting convened by the mayor, in course of last week, and held at the Guildhall, Shrewsbury, it has been resolved to adopt measures for the establishment of baths and washhouses in this borough.